

Work Order ID 66213

February 7, 2011 1:44:34 PM



Page 1

Item ID:	D4196-041	Accept		Setup	Start	
Revision ID:	PRELIM				Stop	
Item Name:	Solenoid Assembly					
Start Date:	2/07/11	Start Qty:	2.00	Cust Item ID:		
Required Date:	2/18/11	Req'd Qty:	2.00	Customer:		
Reference:						

Approvals:	Process Plan:	<u>CZ</u>	Date:	<u>11/02/07</u>	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4196	PA3 7A4 <u>Jan 11-03-23</u>								
100	Pick Kit	0.00							
	Packaging	0.00							
Packaging	Memo								
110		0.00							
	Small Fab	0.00							
Small Fab	Memo								
	ASSEMBLE AS PER DWG								
120	QC5- Inspect part completeness to step on W/O	0.00							
	QC	0.00							
Quality Control	Memo								

Jan 11-03-25 2 ϕ

Jan 11-03-25 2 ϕ

POSITIVE
RECALL

-inspected to spec
7A4 only
6 w/03/28 @

PRELIMINARY ISSUE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			


NOTE: Date & initial all entries



Work Order ID 66213



February 7, 2011 1:44:34 PM



Page 2

Item ID: D4196-041 Accept  Setup Start 
Revision ID: PRELIM Stop 
Item Name: Solenoid Assembly
Start Date: 2/07/11 Start Qty: 2.00  Cust Item ID:
Required Date: 2/18/11 Req'd Qty: 2.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  Packaging Packaging	Identify as per dwg & Stock Location: <i>Peel Sheb</i> Memo	0.00 0.00							
140  QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

Jan 11 03:30 *2* *Ø*

11-06-9 (2)

FD1344

POSITIVE RECALL
EFFECTIVE *11/02/08* AUTH *ll*
CEASED _____ DATE _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

February 7, 2011 1:44:33 PM

Work Order ID: 66213

Parent Item: D4196-041

Parent Item Name: Solenoid Assembly



Start Date: 2/07/11

Required Date: 2/18/11

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 10-12-14 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
53073 		Purchased	No				Each	0.0000		2			
Terminal, Ring, #6 Bolt													
54311-1 		Purchased	No				Each	0.0000		2			
Terminal, Ring, #8 Bolt													
D4196-1 		Manufactured	No				Each	0.0000		2			
Solenoid													
MS20392-1C15 		Purchased	No				Each	0.0000		2			
Pin													
NAS1149DN532J 		Purchased	No				Each	0.0000		2			
Washer													
MS24665-136 		Purchased	No			100	Each	140.0000	1				
Cotter Pins													

m116954-

m116954-

~~m116287~~ 667505

m116899
~~m116287~~

(2) m116934 - 11-03-23

11-03-23

Location

Loc Qty

Loc Code

ST309

140

2421

140

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

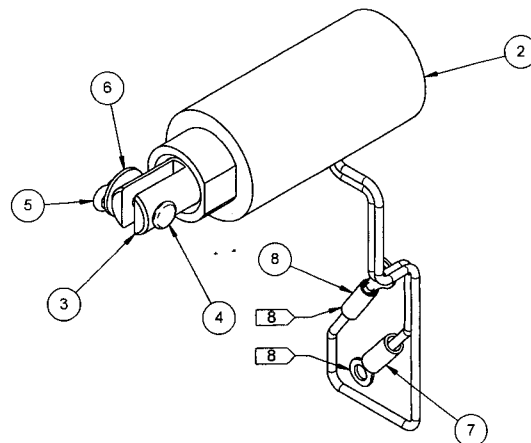
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM NO.	Default/QT ^y . -041	PART NUMBER	DESCRIPTION
1	X	D4196-041	SOLENOID ASSEMBLY
2	1	D4196-3	SOLENOID
3	1	D4196-5	SOLENOID PLUNGER
4	1	MS20392-1C15	CLEVIS PIN
5	1	MS24665-136	COTTER PIN
6	1	NAS1149DN532J	WASHER
7	1	53073	TERMINAL, RING, #6 BOLT
8	1	54311-1	TERMINAL, RING, #8 BOLT



D4196-041 SOLENOID

NOTES:

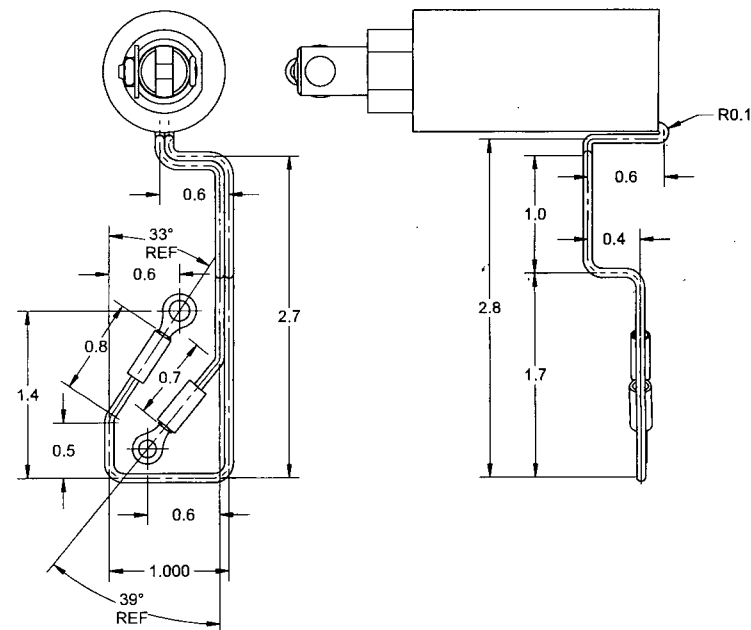
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.25 lbs
- 8) CRIMP RING TERMINALS USING 22-18 OR 22-16 PIDG (RED) TOOL

PRELIMINARY ISSUE

10.12.02

SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 66213
CX11102107



PA3	NEW ISSUE	10.12.02
REV.	DESCRIPTION	BY DATE
DESIGN		
DRAWN		
CHECKED		
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	10.12.02	

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4196	REV. PA3
TITLE SOLENOID	SCALE NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

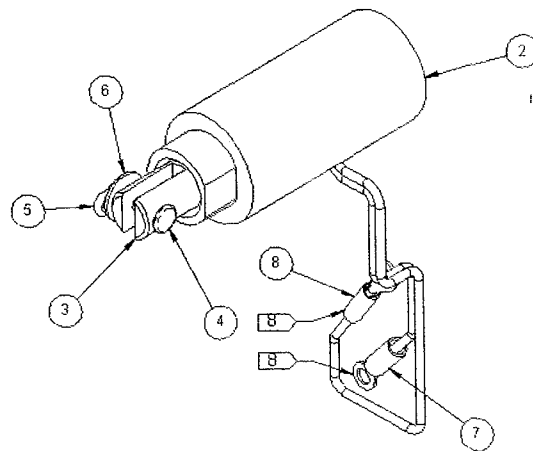
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

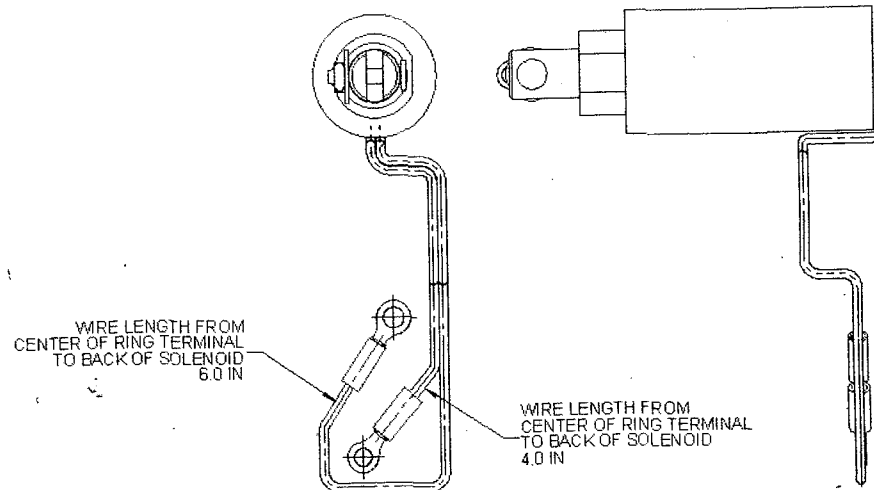
NOTE: Date & initial all entries

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4196-041	SOLENOID ASSEMBLY
2	1	D4196-3	SOLENOID
3	1	D4196-5	SOLENOID PLUNGER
4	1	MS20392-1C15 ✓	PIN
5	1	MS24665-136 ✓	COTTER PIN
6	1	NAS1149DN532J ✓	WASHER
7	1	53073 ✓	TERMINAL, RING, #6 BOLT
8	1	54311-1 ✓	TERMINAL, RING, #8 BOLT



D4196-041 SOLENOID

w/o 66213



- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.25 lbs
 - 8) CRIMP RING TERMINALS USING 22-18 OR 22-16 PIDG (RED) TOOL

PRELIMINARY ISSUE

10.12.02

PA4	NEW ISSUE	DESCRIPTION	BY	DATE
REV.				
DESIGN				
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	10.12.02			

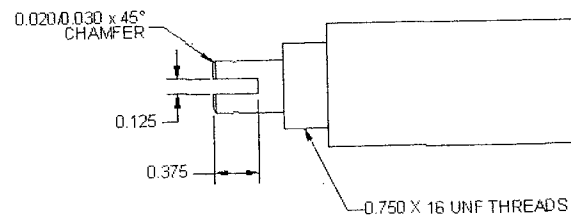
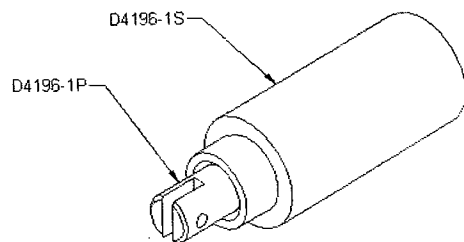
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4196** REV. PA4
SHEET 1 OF 4

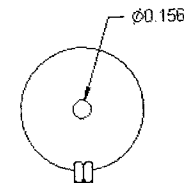
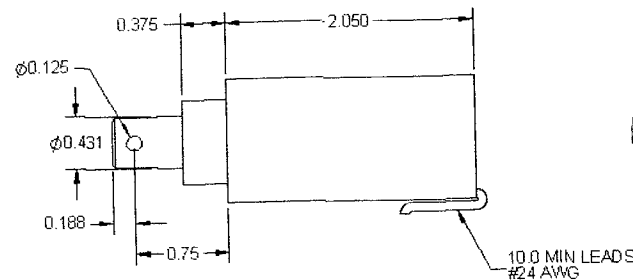
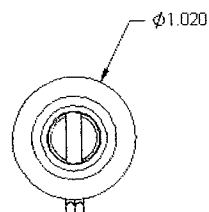
TITLE **SOLENOID** SCALE NTS

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SPECIFICATION CONTROL DRAWING







w/o 66213

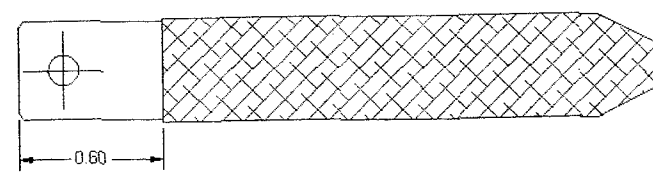
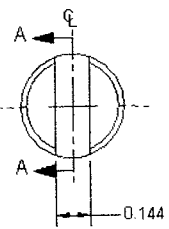


DART PART NUMBER	DESCRIPTION	MANUFACTURER	MANUFACTURER PART NUMBER
D4196-1	SOLENOID	TESTCO	195206-227

D4196-1 SOLENOID

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.25 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PA4
MFG. APPR.		D4196	SHEET 2 OF 4
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DE APPR.		SOLENOID	NTS
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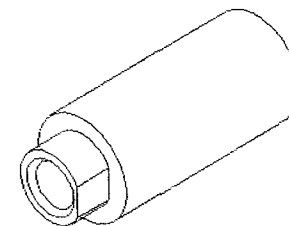
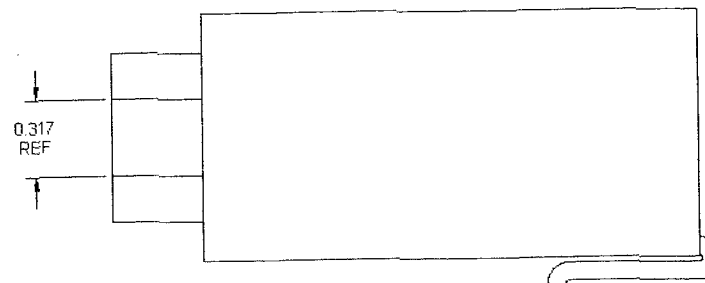
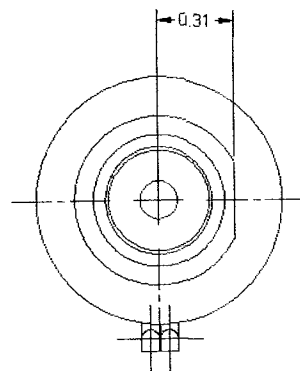
SECTION A-A
SCALE: 2X

D4196-3 PLUNGER

w/o 66213

- NOTES:
- 1) MATERIAL: MADE FROM D4196-1P
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.10 lbs

DESIGN	1	DART AEROSPACE LTD	
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CHECKED	3	DRAWING NO.	REV. PA4
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D4196-5 SOLENOID

w/o 66213

NOTES

- 1) MATERIAL: MADE FROM D4196-1S
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 010 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.15 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAMMERSBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PA4
MFG. APPR.		D4196	SHEET 4 OF 4
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